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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/679,348

10/07/2003

Liang-Ying Huang

HUAN3219/EM

3853

34283 7590 01/10/2007
QUINTERO LAW OFFICE, PC
2210 MAIN STREET, SUITE 200
SANTA MONICA, CA 90405

EXAMINER

LEE, EDMUND H

ART UNIT

PAPER NUMBER

1732

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

SUPPLEMENTAL
Office Action Summary

Application No.

10/679,348

Applicant(s)

HUANG ET AL.

Examiner

EDMUND H. LEE

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1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims introduce new matter into the disclosure. The added material which is not supported by the original disclosure is as follows:

The deletion of "plastic substrate" from the instant claims raises an issue of new matter. The instant specification does not support the scope or breadth of the term "substrate." Throughout the instant specification, the substrate is referred to as being plastic. There is no support for a substrate being other than plastic.

Correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins (USPN 5399390) in view of Moshrefzadeh et al (USPN 6077560) and Nakahara

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et al (US 2004/0004691) . In regard to claim 1, Atkins teaches the basic claimed process including a method of making a color filter (col 2, lns 24-30 and 35-41; col 3, lns 30-35, 40-55, and 61-68; col 4, lns 13-25 and 49-56; and figs 2-4); providing a substrate with an extrusion method, the substrate having a plurality of grooves (col 2, lns 24-30 and 35-41; col 3, lns 30-35, 40-55, and 61-68; col 4, lns 13-25 and 49-56; and figs 2-4); filling the primary colors of red, green, and blue into the groove by jetting (col 2, lns 24-30 and 35-41; col 3, lns 30-35, 40-55, and 61-68; col 4, lns 13-25 and 49-56; and figs 2-4); and covering a plane passivation layer on the top surface of the substrate (col 2, lns 24-30 and 35-41; col 3, lns 30-35, 40-55, and 61-68; col 4, lns 13-25 and 49-56; and figs 2-4). Atkins, however, does not teach jetting black photo-resist liquids by an inkjet printing method. Moshrefzadeh et al teach a method of molding a color filter for an LCD; and depositing black photo-resists onto a plastic substrate, which has multiple grooves therein (col.9, lns 12-25; fig 2g). Nakahara teach a method of molding a color filter for an LCD; and inkjet printing a resist onto a substrate (paragraph 0060). Nakahara also teaches that inkjet printing and depositing are substitutable alternatives for forming a resist (paragraph 0060). Atkins, Moshrefzadeh et al, and Nakahara are combinable because they are analogous with respect to liquid crystal displays. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to jet by inkjet printing a black photo-resist as taught by Moshrefzadeh et al and Nakahara in the process of Atkins in order to produce a color filter having high quality. In regard to claims 2-3, such are taught by Atkins (col 2, lns 24-30 and 35-41; col 3, lns 30-35, 40-55, and 61-68; col 4, lns 13-25 and 49-56; and figs 2-4). In regard to claims

4-5, such are taught by the above combination of Atkins, Moshrefzadeh et al, and Nakahara. In regard to claim 6, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed design is well-known in the color filter art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed design in the process of Atkins in order to form a diverse product. In regard to claim 7, such is taught by Atkins (col 2, lns 24-30 and 35-41; col 3, lns 30-35, 40-55, and 61-68; col 4, lns 13-25 and 49-56; and figs 2-4).

4. Applicant's arguments filed 6/24/06 have been fully considered but they are not persuasive. Applicant argues that the problems addressed in each of the prior art references are different; therefore there is no suggestion to combine the references. Applicant is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

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the references showed that inkjet printing and depositing are substitutable alternatives for forming a black photo-resists on a substrate. Since they are substitutable alternatives, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form a black photo-resist on the substrate of Atkins by inkjet printing as taught by Moshrefzadeh and Nakahara. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. Applicant's remarks filed 12/1/06 with regard to receipt of a duplicate Office action have been noted. It appears that the non-final Office action mailed 3/24/06 was mistakenly reprinted as the final Office action. Examiner apologizes for the confusion.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571.272.1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE
Primary Examiner
Art Unit 1732

EHL



1/8/07